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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,467

09/27/2006

Jean-Luc Dreyer

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YOUNG & THOMPSON  
209 Madison Street  
Suite 500  
ALEXANDRIA, VA 22314

EXAMINER

YAGER, JAMES C

ART UNIT

PAPER NUMBER

4145

MAIL DATE

DELIVERY MODE

04/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,467	<b>Applicant(s)</b> DREYER, JEAN-LUC	
	<b>Examiner</b> JAMES YAGER	<b>Art Unit</b> 4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060427</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "provided, in the sheet, at regular intervals, with a certain number of pockets connected to the guidance region for the rotational axle" in lines 2-4. It is not clear what the applicant intended to recite.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreyer (EP 1013394, see machine translation) in view of Fleming (US 6,450,222).

Regarding claim 1, Dreyer discloses a process for the production of pieces of synthetic material of hollow annular cross-section ([0001]), made by preliminary injection of melted synthetic material into a mold ([0011]), followed by the injection of a fluid under pressure adapted to press the molten material against the walls of the mold, whilst terminating the filling of the imprint ([0011]), characterized in that it consists essentially in carrying out the injection of melted synthetic material at the shank or hub ([0014]), by means of an opening provided for this purpose in the mold ([0014]) and in that the injection of a fluid is carried out, adjacent the shank or hub ([0014]), permitting the production of a zone of guidance for the axle of rotation (Fig. 1, 4). Dreyer does not disclose that the melted synthetic material is injected through at least one opening provided in the hub.

Fleming discloses a process for the production of pieces of synthetic material of hollow annular cross-section (C1/L5-10, non-pneumatic tire), made by preliminary injection of melted synthetic material into a mold characterized in that it consists essentially in carrying out the injection of melted synthetic material at the shank or hub, by means of an opening provided for this purpose in the mold and in that the injection of

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a fluid is carried out, adjacent the shank or hub, through at least one opening provided in the hub (C4/L60-65, Fig. 3).

Dreyer and Fleming are analogous art because they both teach about processes for the production of pieces of synthetic material of hollow annular cross-section. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate injecting the fluid through at least one opening provided in the hub as disclosed by Fleming into the process of Dreyer. Doing so would amount to nothing more than a use of a known method for its intended use in a known environment to accomplish entirely expected result.

Regarding claims 2-5, Dreyer further discloses a process characterized in that the injection of fluid is carried out through the hub permitting the production of the zone of guidance for the rotation axle (Fig. 2, 4), characterized in that after solidification of the synthetic material constituting the piece, the pressure of the fluid is stopped and the conduit connected to the injection hub is emptied, such that said fluid is evacuated from the piece leaving in this latter only veins formed in the material constituting it ([0017]), Characterized in that the bubbles formed by injection of fluid through the hub carry out an intimate application of the synthetic material against the corresponding walls of the mold, namely those delimiting the ribs or radii and/or a sheet and a hollow cross-section, these bubbles expanding in a perfectly balanced manner in the portion of the mold corresponding to the hollow annular cross-section and being adapted to form, between two bubbles emanating from two different ribs or radii, a separation wall ([0017], [0018]), characterized in that in the case of producing pieces, comprising a

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sheet, it consists in delimiting in this sheet, at regular intervals, a certain number of pockets of fluid by means of the injection hub forming a guidance zone for the rotation axle ([0018]),

Regarding claims 6-17, Dreyer discloses piece of hollow synthetic material, obtained by the practice of the process according to claim 1 ([0001], [0011], [0014], Fig. 1), characterized in that it is of one piece construction and has a wall thickness of the hollow annular cross-section that is constant and small ([0012]), characterized in that it has a hollow annular cross-section provided with hollow sections delimited by transverse walls, these hollow sections being each connected to a corresponding hollow section delimited in a rib or radius and/or in the sheet (see claim 7), characterized in that it comprises a hollow annular cross-section connected to its hub or shank by one or several radii or ribs disposed at regular intervals and integrated or not into a sheet (see claim 8), characterized in that it is provided, in the sheet, at regular intervals, with a certain number of pockets connected to the guidance region for the rotational axle (see claim 9), characterized in that the radii or ribs have a circular cross-section (see claim 10), characterized in that it is provided, by over-molding , with a covering strip of a soft synthetic material, such as synthetic rubber or any other material that can perform the same function (see claim 11), characterized in that it is provided, on at least one side of its hub or shank with means for guidance and snapping into a support (see claim 12), characterized in that the means is in the form of a lug that snaps into an opening provided for this purpose in the hub or shank (see claim 12, Fig. 2), obtained by the practice of the process according to claim 2, 3, 4 and 5 characterized in that it is of one

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piece construction and has a wall thickness of the hollow annular cross-section that is constant and small ([0012]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YAGER whose telephone number is (571)270-3880. The examiner can normally be reached on Mon - Thurs, 7:30am-5pm, EST, Alt. Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on 571 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY 4/22/08

/Basia Ridley/  
Supervisory Patent Examiner, Art Unit 4145